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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,085	08/17/2007	William H. McNamee	011801-0055-999	8794

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EXAMINER	
VALDEZ, DEVE E	
ART UNIT	PAPER NUMBER
1765	
MAIL DATE	DELIVERY MODE
06/08/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,085	MCNAMEE ET AL.	
	Examiner	Art Unit	
	DEVE E. VALDEZ	1765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/23/2011 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 23-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **CARPENTER** et al. (U.S. Patent Application Publication 2003/0153787, hereinafter **CARPENTER**) in view of **BLOOM** et al. (U.S. Publication Application 2003/0187103, hereinafter **BLOOM**).

6. Regarding claims 23-31, **CARPENTER** teaches compounds of the formula (1):

Where: R^2 is the residue of a groups having at least m active hydrogen atoms derived from hydroxyl and/or amino and/or amido groups; AO is an alkylene oxide residue; each n is independently from 2 to 200; m is 2-10; and each R^2 is the residue of a group having at least m active hydrogen atoms derived from hydroxyl and/or amino and/or amido groups. R^3 is H, hydrocarbyl, particularly a C_1 to C_{22} alkyl or alkenyl. [0004-0013]. R^3 is H; hydocarbyl; particularly C_1 to C_{22} alkyl or alkenyl; a long chain alk(en)yl succinic acyl group of the formula: 

Where:

One of R and R^1 in the succinic moiety is C_8 to C_{22} alkenyl or alkyl and the other is hydrogen, and Y is a group OM where M is hydrogen, metal ammonium, amine

especially alkylamine (including alkanolamines), or Y is NR^4R^5 where R^4 and R^5 are each independently hydrogen, a hydrocarbyl, particularly alkyl group, including substituted alkyl, particularly hydroxyl substituted hydrocarbyl, especially polyhydroxy hydrocarbyl, such as hydroxyl substituted and especially polyhydoxy substituted alkyl, groups; a long chain acyl group $-OC.R^6$ is along chain hydrocarbyl group, particularly a C_8 to C_{22} alkyl or alkenyl group [0018-0029] (which would satisfy the acyl group). Also, suitable hydrocarbyl groups include lower alkyl groups, e.g., C_1 to C_6 alkyl groups such as methyl or ethyl groups, acting as chain end caps for one or more of the polyalkylene oxide chains mainly to alter the degree of hydrophilicity of the compounds, and longer chain alkyl or alkenyl groups e.g. C_8 to C_{22} and particularly C_{16} or longer, alkyl or alkenyl groups such as lauryl, oleyl and stearyl groups or mixed alk(en)yl groups derived from natural fats or oils [0067]. **CARPENTER** teaches R^1 is the residue of sorbitol, which is a monosaccharide [0055] (as required by claim 24-26). Furthermore, **CARPENTER** teaches the compounds can be made by reacting an alkoxylated polyhydric alcohol of the formula: $R^2[(AO)_n.H]_m$ where R^2, AO, n, and m are as defined above, with an alkenyl succinic anhydride, and optionally, a reactive derivative of a fatty acid of the formula $H_2OC.R^6$, where R^6 is as defined, in molar ratios corresponding to the number of ASA and optional fatty acid residues desired in the product [0073]. However, **CARPENTER** does not teach the hydrocarbyl group comprising at least two ethylenic double bonds.

7. In the same field of endeavor of a latex paint composition, **BLOOM** teaches polyunsaturated fatty acid containing additives from vegetable oils (Abstract). Also, the latex paint composition contains a polyunsaturated fatty acid or derivative thereof

chemically attached to an alcohol, the chemical attachment is through an ester, ether or urethane linkage [0050]. The term "polyunsaturated fatty acid or derivative thereof" as used herein refers to a polyunsaturated fatty acid moiety or an ester, ether, carbamate or amide derived from said polyunsaturated fatty acid moiety. Examples of a polyunsaturated fatty acid or a derivative thereof include polyunsaturated fatty acid mono-ester of glycols, such as linoleic acid mono-ester of ethylene glycol and linoleic acid mono-ester of propylene glycol [0067]. The polyunsaturated fatty acid derivative behaves as a nonionic surfactant [0070] in latex paint composition.

8. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the polyunsaturated fatty acid or derivative thereof of **BLOOM** with the surfactant composition of **CARPENTER** for the benefit of reducing or eliminating the need for traditional water soluble additives that lower the water resistance of dry paint film and the polyunsaturated fatty acid moieties are capable of oxidative cross-linking during the curing process, forming a dry paint film that is more durable and water-resistant than traditional latex paint compositions. Furthermore, the polyunsaturated fatty acid derivative by virtue of its hydrophobicity behaves as a nonionic surfactant, and improves water resistance.

9. Regarding claims 32 and 33, **BLOOM** teaches polyunsaturated fatty acid such as linoleic acid therefore the properties are intrinsic.

10. Regarding claim 34, **BLOOM** teaches linoleic acid (which satisfies two ethylenic double bonds). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to optimize the proportions of fatty acids through routine

experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima *facie* case of obviousness. See *In re Boesch, 617* F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. *Cir.* 1990), and *In re Aller,* 220 F2d 454,456,105 USPQ 233,235 (CCPA 1955).

11. Claims 35-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over **CARPENTER** et al. (U.S. Patent Application Publication 2003/0153787, hereafter **CARPENTER**) in view of **BLOOM** in further view of **BOUVY** et al. (U.S. Patent No. 6,780,910, hereinafter **BOUVY**).

12. Regarding claims 35-41, the combined disclosures of **CARPENTER** and **BLOOM** are considered to render the invention of claim 1 obvious, see paragraphs 5-8, however, the combined disclosures fail to teach an aqueous emulsion or dispersion of polymeric particles wherein the emulsion or dispersion is formed in the presence of a stabilizing amount of a mixture of compounds represented by formula I.

13. Regarding claims 35- 41, **BOUVY** teaches an aqueous emulsion or dispersion of polymeric particles comprising a compound of formula (I) as defined in clam 35 (Abstract; Col. 1, lines 54-67; Col. 4, lines 57-67) (as required by claim 36. **BOUVY** teaches an aqueous emulsion or dispersion of polymeric particles wherein the polymeric particles comprise an alkyd resin (Abstract; Col. 1, lines 55-67; Col. 4, lines 40-55) (as

required by claim 37). Also, **BOUVY** teaches the alkyd resin is a resin which is the reaction product of (i) one or more polybasic organic acids or anhydrides, (ii) one or more monobasic fatty acid and one or more polyhydric alcohols (Col. 2, lines 52-60) (as required by claim 38). Furthermore, **BOUVY** teaches an aqueous emulsion of an alkyd resin which includes as an emulsifier a compound of formula (1) as defined in claim 1 in combination with an anionic surfactant, particularly an ether carboxylate, an alkyl aryl sulphonate, a phosphate ester, an alkyl ether sulfate, or a mixture of these surfactants, where the weight ratio of compound(s) of the formula (1) to anionic surfactant is in the range 90:10 to 10:90 (Column 3, lines 11-46) (as required by claim 39). **BOUVY** teaches a method of making an aqueous emulsion of an alkyd resin which comprises forming a mixture of the resin and surfactant, including at least one compound of formula as defined in claim 35, including water in the mixture to form a water-in-oil emulsion, and subsequently adding water to the water-in-oil emulsion at least until the emulsion inverts to form an oil disperse phase content of the emulsion to that desired (Column 5, lines 1-9) (as required by claim 40). **BOUVY** teaches polyester resins are well known with wide uses in surface coating such as paints (Column 1, lines 14-15) (as required by claim 41).

14. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have an aqueous emulsion or dispersion as taught by **BOUVY** with the surfactant compositions of **CARPENTER** and **BLOOM** for the benefit of producing alkyd resin emulsions which exhibits excellent properties in surface coatings.

Response to Arguments

15. Applicant's arguments filed 5/23/2011 have been fully considered but they are not persuasive. The response is insufficient to rebut the obviousness rejection. Despite the applicant's arguments in view of the teachings of the prior art, the position is maintained. Firstly, the applicants are concerned about the hindsight approach that is being applied in combining the references supporting the rejections. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Secondly, the applicant argues that the examiner has failed to provide evidence to support the assertion the one skilled in the art would have the required motivation to combine the baby shampoo components of **CARPENTER** with the latex paint compositions of **BLOOM** to develop the resin emulsifying compounds of the pending claims. The examiner has considered the applicant’s arguments, however the examiner disagrees. Although **CARPENTER** is directed towards providing thickener compounds in personal care products such as baby shampoos and **BLOOM** is directed to latex paint compositions. It is not seen how the “baby shampoo contents” (polyunsaturated fatty acid) of **CARPENTER** would function differently since the references are drawn to an aqueous system comprising

surfactants. It is prima facie obvious to combine individually old ingredients for their known function, i.e., it is obvious to add a known ingredient for its known function; *In re Linder 173 USPQ 356; In re Dial et al 140 USPQ 244*. Moreover, it is noted that a prima facie case of obviousness does not require the solution of the same problem or recognition of the same advantages as applicant's invention. *In re Dillion, 16 USPQ 2nd 1897*.

Thirdly, the applicant argues that neither reference teaches or suggests compounds having on average at least 1.2 groups/compound that are or comprise a hydrocarbyl group comprising at least two ethylenic double bonds. The examiner has considered the applicant's argument, however, the examiner disagrees. **BLOOM** teaches a dispersant comprising a polyunsaturated fatty acid or derivative thereof that contains one or more of groups of glycol [0066]. **BLOOM** exemplifies of polyunsaturated fatty acid or a derivative thereof include polyunsaturated fatty acid mono-esters of glycols, such as linoleic acid mono-ester of ethylene glycol and linolenic acid mono-ester of propylene glycol [0067]. Since **BLOOM** teaches polyunsaturated fatty acid or derivative thereof, it is not seen how the polyunsaturated fatty acid of **BLOOM** is patentably distinct from the instant invention. Furthermore, a reference is good for all its worth including non-exemplified disclosures. Lastly, the applicant argues that the claims are commensurate in scope with unexpected results. The examiner has considered the applicant's examples, however, the applicant disagrees that Example 1 ("Inventive Example") is commensurate in scope with the instant claims. The amounts and components used in Example 1 are more specific with regard to the instant claims. The instant claims are

broad, therefore the showing of unexpected results are not commensurate in scope with the claims in terms of the components and amount of components as indicated in the advisory action. It has been held that to overcome a reasonable case of prima facie obviousness a given claim must be commensurate in scope with any showing of unexpected results, *In re Greenfield, 197 USPQ 227.*

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVE E. VALDEZ whose telephone number is (571)270-7738. The examiner can normally be reached on Mon-Thurs, 9:30 am- 7:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. E. V./
Examiner, Art Unit 1765

/Rabon Sergent/
Primary Examiner, Art Unit 1765